

Average precipitation and departure from the normal.

Districts.	Number of stations.	Average.		Departure.	
		Current month.	Percent-age of normal.	Current month.	Accumulated since Jan. 1.
New England	10	Inches.	Inches.	Inches.	Inches.
Middle Atlantic	12	4.30	108	+0.3	-2.2
South Atlantic	10	3.00	97	-0.1	-7.5
Florida Peninsula	7	3.90	130	+0.9	-7.4
East Gulf	7	0.82	34	-1.6	+1.3
West Gulf	7	3.10	84	-0.6	+9.2
Ohio Valley and Tennessee	12	2.44	69	-1.5	+2.3
Lower Lake	8	5.28	147	+1.7	-5.9
Upper Lake	9	4.06	128	+0.9	-1.1
North Dakota	8	2.50	100	0.0	-2.3
Upper Mississippi Valley	11	0.72	116	+0.1	+2.3
Missouri Valley	10	1.81	82	-0.4	+0.9
Northern Slope	7	0.79	61	-0.5	+2.6
Middle Slope	6	0.31	61	-0.2	-1.3
Southern Slope	6	0.52	63	-0.3	+1.2
Southern Plateau	15	1.04	91	-0.1	+8.8
Middle Plateau	9	1.47	258	+0.9	-0.3
Northern Plateau	10	1.34	143	+0.4	-2.7
North Pacific	9	1.23	75	-0.4	-1.5
Middle Pacific	5	5.49	75	-1.8	-1.6
South Pacific	4	4.77	161	+1.8	-1.2
		5.14	384	+3.8	-0.5

In Canada.—Professor Stupart says:

In Ontario, Quebec, and the Maritime Provinces the precipitation was in excess of the average and chiefly in the form of rain; there were, however, several falls of snow in all districts, and in the St. Lawrence Valley there was a heavy northeast snowstorm during the 25th and 26th.

In Manitoba, Assiniboia, and southern Alberta the precipitation was almost wholly snow, and varied between 8 and 16 inches; in Saskatchewan and northern Alberta the fall was much less.

On the last days of the month the more southwestern portions of the northwest prairies were bare, but a covering of from 5 to 10 inches was very general in Manitoba and over most of Assiniboia, and as much as 20 inches was reported from Qu'Appelle. The more eastern and northern portions of Ontario reported several inches on the ground, but rapidly disappearing. In Quebec and over the greater portion of New Brunswick a covering was general, but nowhere very deep, 12 inches at Brome, Que., being the deepest reported. In southern and eastern Nova Scotia and in Prince Edward Island the depth ranged between 2 and 4 inches.

HUMIDITY.

The averages by districts appear in the subjoined table:

Average relative humidity and departures from the normal.

Districts.	Average.	Departure from the normal.	Districts.	Average.	Departure from the normal.
New England	79	+ 1	Missouri Valley	73	+ 1
Middle Atlantic	74	- 2	Northern Slope	69	+ 3
South Atlantic	78	- 1	Middle Slope	63	+ 1
Florida Peninsula	77	- 4	Southern Slope	65	+ 4
East Gulf	76	- 1	Southern Plateau	40	- 6
West Gulf	75	+ 2	Middle Plateau	59	+ 5
Ohio Valley and Tennessee	73	0	Northern Plateau	80	+ 7
Lower Lake	78	+ 2	North Pacific Coast	88	- 1
Upper Lake	83	+ 3	Middle Pacific Coast	79	+ 6
North Dakota	81	+ 2	South Pacific Coast	64	- 3
Upper Mississippi	76	+ 2			

SUNSHINE AND CLOUDINESS.

The distribution of sunshine is graphically shown on Chart VII, and the numerical values of average daylight cloudiness, both for individual stations and by geographical districts, appear in Table I.

The averages for the various districts, with departures from the normal, are shown in the table below:

Average cloudiness and departures from the normal.

Districts.	Average.	Departure from the normal.	Districts.	Average.	Departure from the normal.
New England	7.0	+1.4	Missouri Valley	5.0	+0.1
Middle Atlantic	6.1	+0.9	Northern Slope	4.9	+0.8
South Atlantic	4.5	0.0	Middle Slope	4.2	+0.6
Florida Peninsula	4.3	-0.8	Southern Slope	2.8	-0.4
East Gulf	4.5	0.0	Southern Plateau	2.6	+0.3
West Gulf	4.4	-0.2	Middle Plateau	4.8	+1.2
Ohio Valley and Tennessee	5.7	0.0	Northern Plateau	6.6	+0.6
Lower Lake	7.9	+0.7	North Pacific Coast	6.5	-0.8
Upper Lake	7.7	+0.7	Middle Pacific Coast	6.0	+2.2
North Dakota	5.0	-0.8	South Pacific Coast	4.2	+0.8
Upper Mississippi	5.6	+0.8			

WIND.

The maximum wind velocity at each Weather Bureau station for a period of five minutes is given in Table I, which also gives the altitude of Weather Bureau anemometers above ground.

Following are the velocities of 50 miles and over per hour registered during the month:

Maximum wind velocities.

Stations.	Date.	Velocity.	Direction.	Stations.	Date.	Velocity.	Direction.
Amarillo, Tex	20	52	nw.	Cleveland, Ohio	25	54	n.
Do	24	56	n.	Do	26	61	n.
Block Island, R. I.	9	71	w.	Hatteras, N. C.	4	51	n.
Do	10	53	w.	Do	8	53	s.
Do	22	50	w.	Indianapolis, Ind.	21	51	s.
Buffalo, N. Y.	12	51	ne.	New York, N. Y.	8	50	sw.
Do	21	80	w.	Do	9	74	nw.
Carson City, Nev.	18	54	sw.	Do	15	50	w.
Cheyenne, Wyo.	21	54	w.	Port Huron, Mich.	21	76	w.
Chicago, Ill.	24	50	ne.	Sacramento, Cal.	21	52	w.
Cleveland, Ohio.	5	54	nw.	Williston, N. Dak.	9	51	se.
Do	21	63	sw.	Winnemucca, Nev.	21	50	s.

ATMOSPHERIC ELECTRICITY.

Numerical statistics relative to auroras and thunderstorms are given in Table VII, which shows the number of stations from which meteorological reports were received, and the number of such stations reporting thunderstorms (T) and auroras (A) in each State and on each day of the month, respectively.

Thunderstorms.—Reports of 976 thunderstorms were received during the current month as against 732 in 1899 and 1,533 during the preceding month.

The dates on which the number of reports of thunderstorms for the whole country were most numerous were: 20th, 115; 23d, 114; 18th, 107.

Reports were most numerous from: Illinois, 195; Missouri, 83; New York, 59.

Auroras.—The evenings on which bright moonlight must have interfered with observations of faint auroras are assumed to be the four preceding and following the date of full moon, viz, 2d to 10th.

In Canada.—Auroras were reported as follows: Father Point, 17th; Minnedosa, 3d; Prince Albert, 19th.

Thunderstorms were reported as follows: Halifax, 9th; Port Stanley, Toronto, Parry Sound, 21st; Hamilton, Bermuda, 7th and 8th.

DESCRIPTION OF TABLES AND CHARTS.

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For description of tables and charts see page 453 of REVIEW for October, 1900.

TABLE II.—*Climatological record of voluntary and other cooperating observers*—Continued.**EXPLANATION OF SIGNS.**

• Extremes of temperature from observed readings of dry thermometer.

A numeral following the name of a station indicates the hours of observation from which the mean temperature was obtained, thus:

¹ Mean of 7 a. m. + 2 p. m. + 9 p. m. + 9 p. m. + 4.

² Mean of 8 a. m. + 8 p. m. + 2.

³ Mean of 7 a. m. + 7 p. m. + 2.

⁴ Mean of 6 a. m. + 6 p. m. + 2.

⁵ Mean of 7 a. m. + 2 p. m. + 2.

* Mean of readings at various hours reduced to true daily mean by special tables.

⁷ Mean from hourly readings of thermograph.

⁹ Mean of sunrise and noon.

¹⁰ Mean of sunrise, noon, sunset, and midnight.

The absence of a numeral indicates that the mean temperature has been obtained from daily readings of the maximum and minimum thermometers.

An italic letter following the name of a station, as "Livingston *a*," "Livingston *b*," indicates that two or more observers, as the case may be, are reporting from the same station. A small roman letter following the name of a station, or in figure columns, indicates the number of days missing from the record; for instance "*a*" denotes 14 days missing.

No note is made of breaks in the continuity of temperature records when the same do not exceed two

days. All known breaks, of whatever duration, in the precipitation record receive appropriate notice.

CORRECTIONS.

June, 1900, Alabama, Warrior, make precipitation 18.65 instead of 17.75; July, 1900, Alabama, Oxanna, make precipitation 6.41 instead of 6.61; August, 1900, Alabama, Fort Deposit, make precipitation 4.35 instead of 4.55; August, 1900, page 328, make average maximum pressure at Honolulu 29.991 instead of 29.954.

October, 1900, Missouri, Mineralspring, make minimum and mean temperatures 39° and 62.9°, instead of 33° and 59.9°.

NOTE.—The following change has been made in names of stations, Oklahoma. Wood changed to Poarch.

TABLE X.—Data furnished by the Canadian Meteorological Service, November, 1900.

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